Title: City Size, Industrial Composition, and the Urban Wage Premium

Author: Joel Elvery
Affiliation: Bureau of Labor Statistics
Email: elvery.joel@bls.gov

Abstract:

This paper is an empirical investigation of whether differences in labor markets by metropolitan statistical area (MSA) size can be explained by differences in the MSAs industrial compositions. Relative to smaller MSAs, large MSAs have higher wage levels, more wage dispersion, higher wage returns to education, and are more likely to attract highly educated people (Glaeser and Mare 2001, Wheeler 2001, Berry and Glaeser 2005). However, high wages are not exclusive to large MSAs. In fact, 18 of the 38 MSAs with 1999 median family income above $55,000 have population below 1 million. This leads to the question of whether large MSAs have higher wages due to their size or due to other factors, in particular their industrial composition. I focus on industrial composition because many large MSAs have diverse economies and high concentrations of professional services and finance employment. Using the micro-data from the U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) for 2001 and 2004, I generate industrial location quotients for MSAs in the United States. Based on the similarity of their sets of location quotients, I classify metropolitan areas into functional groups. For example, areas with concentrations in professional services and finance form one group while areas with a concentration only in finance form another. This work adds to the literature on the classification of cities (e.g. Noyelle and Stanback 1984 and McDonald 1992) by using newer micro-data. The QCEW micro-data use the North American Industry Classification System codes, which provide more detail for the service and FIRE sectors than was possible with the Standard Industrial Classification System used by most of the prior research. The QCEW micro-data also allow me to calculate location quotients for industry-MSA cells that can not be included in published data. I will combine the location quotients and MSA classifications with the 2000 Census Public Use Microdata Sample to study how wages, returns to education, and native migration patterns vary across the different functional groups of MSAs. I will also test whether it is possible to distinguish MSA size effects from MSA industrial composition effects.